

AMENDMENTS TO THE DRAWINGS

The drawings on the replacement sheets attached hereto include changes to Figures 1-5 in the application. The replacement sheets replace original sheets 1-5 and now show Figures 1-5 with the label --Prior Art--.

REMARKS

The Office Action dated January 25, 2006 has been received and its contents carefully noted. By the above actions, claims 1, 3, 4, and 6 are now pending in the application. Specifically, claim 1 is amended to include the limitations of claims 2 and 5, which are now canceled. Claim 6 is merely amended to depend from claim 1. In addition, replacement sheets with Figures 1-5 are submitted herewith to add the label "Prior Art" to the Figures. No new matter has been added. Support for the Amendments is provided in the original claims, Figures 1-9, and related text of the specification.

In view of these actions and the following remarks, reconsideration of this application is now requested.

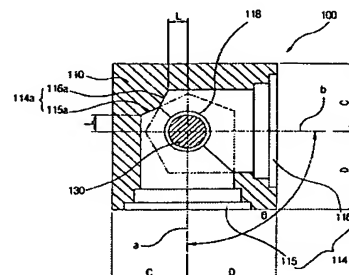
Drawings

Figures 1-5 are objected to because they are not designated by a legend such as --Prior Art--. Replacement sheets have been submitted herewith in compliance with 37 C.F.R. 1.121(d), showing Figures 1-5 with the label --Prior Art--. Therefore, withdrawal of the objection to the drawings is in order and is respectfully requested.

Rejections under 35 U.S.C. § 102

Claims 1-5 are rejected under 35 U.S.C. § 102(b) as being anticipated by Japanese Patent 2001241808 to Fukuda et al. This rejection is traversed for the reasons advanced in detail below.

In particular, claim 1 recites that "the guide part comprises inclined surfaces that are connected to each other, which are respectively formed by end angles of drill blades when the inlet and the outlet is formed." As FIG. 8 of the present specification shows, the guide part 114a is formed when the inlet 115 and the outlet 116 are drilled for forming the second flow channel 114. In other words, the guide part 114a is formed by the intersection of the inclined surface 115a of the inlet 115 and the inclined surface 116a of the outlet 116, where the inclined surfaces are formed by an angle of the end blade of a drill. Because the guide part 114a prevents a sudden bending of the intersection portion between the inlet 115 and the outlet 116, an



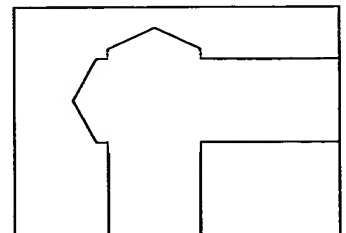
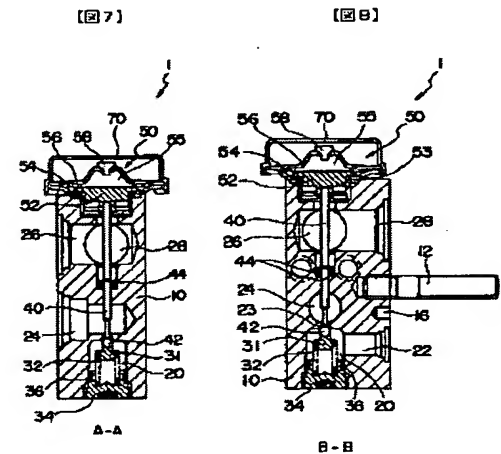
eddy is not generated during the flow of the working fluid. Also, the working fluid flows smoothly inside the second flow channel 114. Additionally, noise generated when a path area is widened is prevented due to reduction of the path area at the intersection portion. Furthermore, in contrast with the prior art, there is no concern over the stagnant refrigerant since no groove by the end angle of the drill blade is formed.

As the Examiner points out, Fukuda et al. appears to disclose flow passages 26 and 28 with central lines at a right angle. (See Office Action, page 2, lines 18-19.) The Examiner asserts that FIGS. 7 and 8 of Fukuda et al. show that the flow is guided by the inclined surface generated by the drill blade. (See Office Action, page 2, lines 19-20.) However, further examination of FIGS. 7 and 8 of Fukuda et al. demonstrates that while the paths of the end angles of the drill blades used to form the flow passages 26 and 28

cross each other, the end angles of the drill blades do not form the guide part recited in the claimed invention. In particular, FIG. 7 of Fukuda et al. shows that the inclined surfaces in passage 26 created by the end angles of the drill blades are spaced by some distance from the intersection with passage 28.

Similarly, FIG. 8 of Fukuda et al. shows that the inclined surfaces in passage 28 created by the end angles of the drill blades are spaced by some distance from the intersection with passage 26. Because the inclined surfaces of both passages 26 and 28 are spaced away from the intersection of the two passages, the inclined surfaces cannot be connected to each other to form the guide part as recited in independent claim 1. Moreover, FIGS. 7 and 8 of Fukuda et al. indicate that the end angles of the drill blades create a groove at the intersection of passages 26 and 28, as the drill blades proceed past the intersection. Thus, refrigerant resistance may result, and concerns over stagnant refrigerant at the groove might be heightened.

Accordingly, because Fukuda et al. fails to disclose a "guide part including inclined surfaces that are connected to each other," as recited by independent claim 1, withdrawal of the rejection of independent claim 1 is in order and is respectfully requested. In addition,



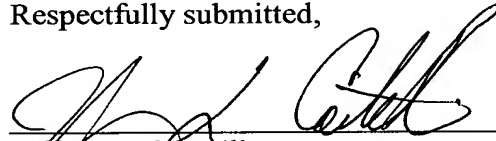
Applicant respectfully submits that dependent claims 3 and 4 are allowable because they depend on what is now believed to be allowable base claims 1.

Allowable Subject Matter

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant appreciates that the Examiner has found that claim 6 contains allowable subject matter. Accordingly, Applicant respectfully submits that dependent claim 6 is allowable at least for its dependency on allowable base claim 1.

Therefore, the present application is now believed to be in condition for allowance. However, should the Examiner find some issue to remain unresolved, or should any new issues arise, which could be eliminated through discussions with Applicant's representative, then the Examiner is invited to contact the undersigned by telephone in order that further prosecution of this application can thereby be expedited.

Respectfully submitted,



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